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FOURTEENTH BIENNIAL REPORT

STATE ENGINEER

PART II

MAPS AND DRAWINGS

1907-1908

Fourteenth Biennial Report

OF THE

State Engineer

TO THE

Governor of Colorado

FOR THE YEARS

1907 and 1908

PART II

CONSISTING OF

Maps and Bridge Drawings

DENVER, COLORADO
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS
1909

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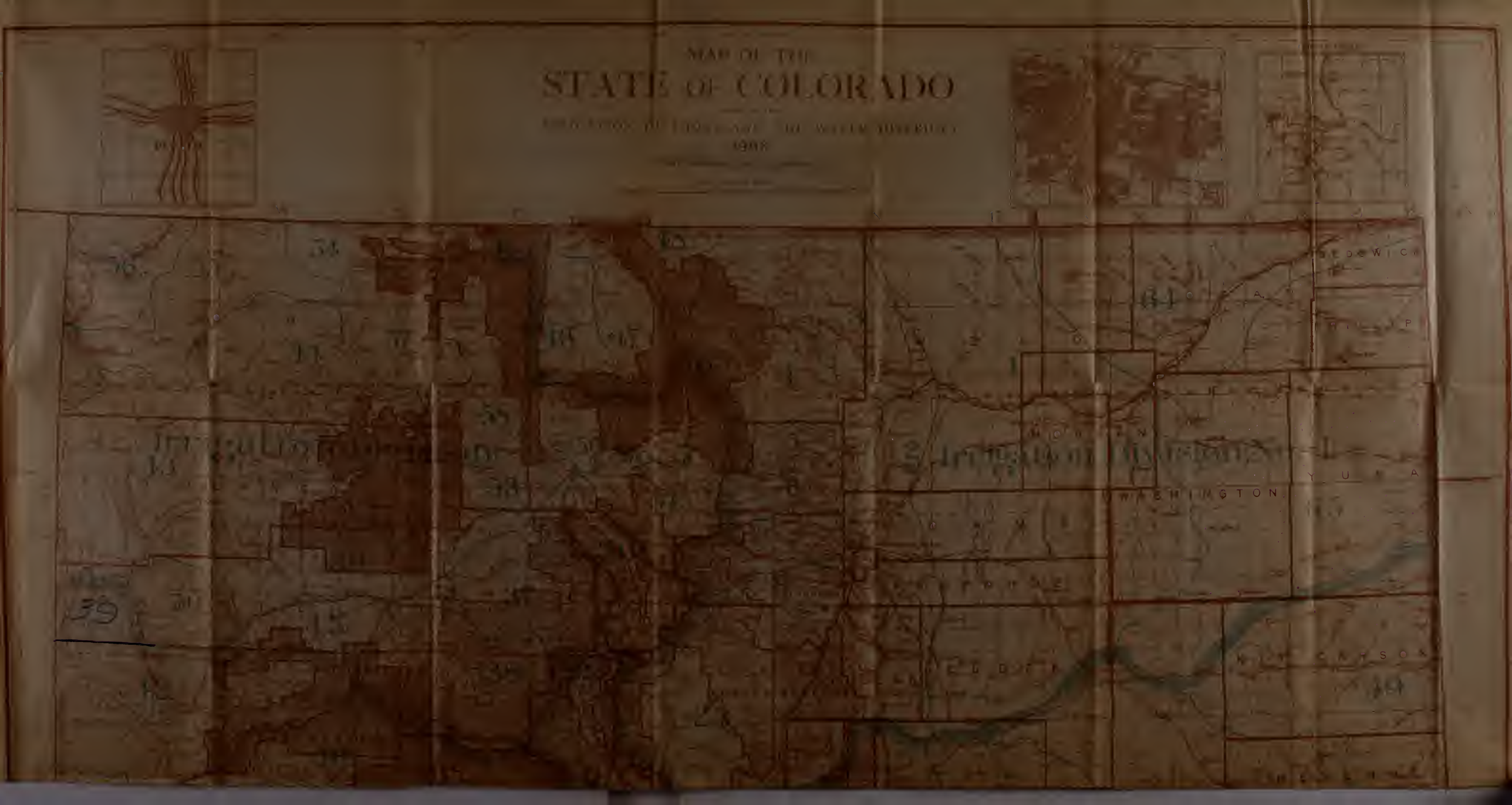
MAP OF THE

STATE OF COLORADO

SHOWING ALL TOWNSHIPS AND WATER DIVISIONS

1905



61
62
15
BEN PROWER
SEDGWICK
BACA

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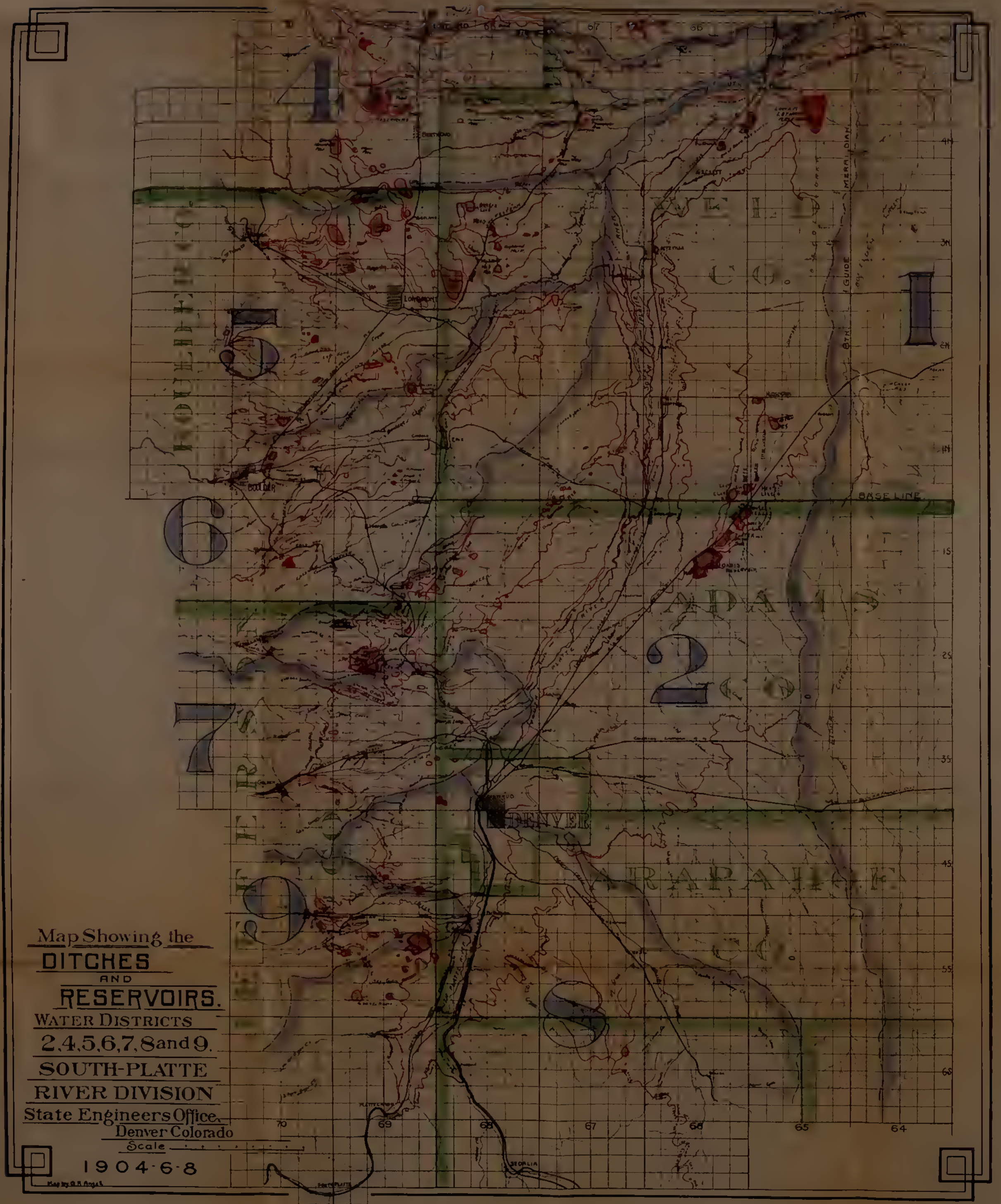
http://archive.org/details/biennialreportofcolo_6

MAP SHOWING DITCHES AND RESERVOIRS
WATER DISTRICTS THREE, FOUR AND FORTY-EIGHT
Cache a la Poudre, Big and Little Thompson and Laramie Drainage
SOUTH PLATTE RIVER DIVISION
COLORADO. 1904. 6.-8

STATE ENGINEER'S OFFICE, DENVER.

Scale


BASE LINE
DENVER
6
7
2
1
Map Showing the
DITCHES
AND
RESERVOIRS.
WATER DISTRICTS
2,4,5,6,7,8 and 9.
SOUTH-PLATTE
RIVER DIVISION
State Engineers Office.
Denver Colorado
Scale
1904-6-8

WATER DISTRICTS 10 & 14.

ARKANSAS RIVER DIVISION

COLORADO.

STATE ENGINEER'S OFFICE, COLORADO.

1904-6-8

Scale =

MAP
SHOWING
THE
DITCHES AND RESERVOIRS
IN
WATER DISTRICT No. 11
ARKANSAS RIVER
DIVISION
COLORADO
1904-6-8

State Engineer's Office, Denver.

Scale -

EL PASO COUNTY

BENT COUNTY

KIOWA COUNTY

OTERO COUNTY

PART OF DISTRICT NO. 18

GOLDEN

LAS ANIMAS COUNTY

19

MAP OF

WATER DISTRICT NO. 17

IN ARKANSAS DIVISION No. 2

COLORADO

STATE ENGINEER'S OFFICE DENVER

1904-6-8

Scale =

MAP
SHOWING THE
DITCHES AND RESERVOIRS
WATER DISTRICTS
18 AND 19
ARKANSAS RIVER DIV.
DRAINAGE OF THE
Apishapa and the Purgatoire Rivers
1904-6-8

State Engineer's Office. Denver. Colo.

Scale =

DITCHES
WATER
18
ARKANSA
Apishapa and
State Engineer's

MAP Showing the DITCHES and RESERVOIRS. WATER DISTRICT 67. ARKANSAS RIVER DIVISION

COLORADO

State Engineers Office, Denver. 1904-6-8 Scale =

MAP OF THE

STATE OF COLORADO

SHOWING THE LOCATION OF THE

TOWN OF PARK

CHEYENNE
LINCOLN
KIOWA
OTERO
BENT
PROWERS
PUEBLO
HUERFANO
LAS ANIMAS
BACA
— STATE ENGINEERS —
STIMSON 1881 TO 1887 SUMMERS 1895 TO 1897.
NETTLETON 1885 TO 1887 FIELD 1897 TO 1899.
GREENE 1887 TO 1893 McCUNE 1899 TO 1903.
MAXWELL 1893 TO 1895 CARPENTER 1903 TO 1905.
CRAMER 1895 TO 1895 JAYCOX 1905 TO 1909.
LEGEND
RESERVOIRS ○ ARTESIAN WELL •
WAGON ROAD —— FLUME ----
WAGON BRIDGE X CANALS --------
INTERNAL IMPROVEMENT FUND

MAP OF THE SANTA FE TRAIL THROUGH COLORADO RELOCATED AND MONUMENTED 1908

STATE ENGINEER'S OFFICE. DENVER. COLO.

SCALE MILES.

MONUMENTS ●

PUEBLO

PUEBLO

OTERO

BENT

PROWERS

KIOWA

LAS ANIMAS

KANSAS

NEW MEXICO.

OKLAHOMA.

STATE LINE

4TH CORRECTION LINE, S.

5TH. CORRECTION LINE, S.

6TH. CORRECTION LINE. S

ARKANSAS RIVER

HUERFANO RIVER

CUCHARAS RIVER

PURGATOIRE RIVER

LAS ANIMAS RIVER

TIMPAS CREEK

CAPOTE CREEK

CEDAR CREEK

MUD CREEK

CLAY CREEK

WOLF CREEK

PLUM CR

TWO BUTTES CREEK

SANTA FE TRAIL

TRINIDAD

LAMAR

EARL

ALPALFA

BESHOAR

THATCHER

TIMPAS

SIMONS

HIGBEE

MORLEY

WATERVILLE

EMORY GAP

LYNN

PORTLAND

CIMARRON RIVER

PUEBLO

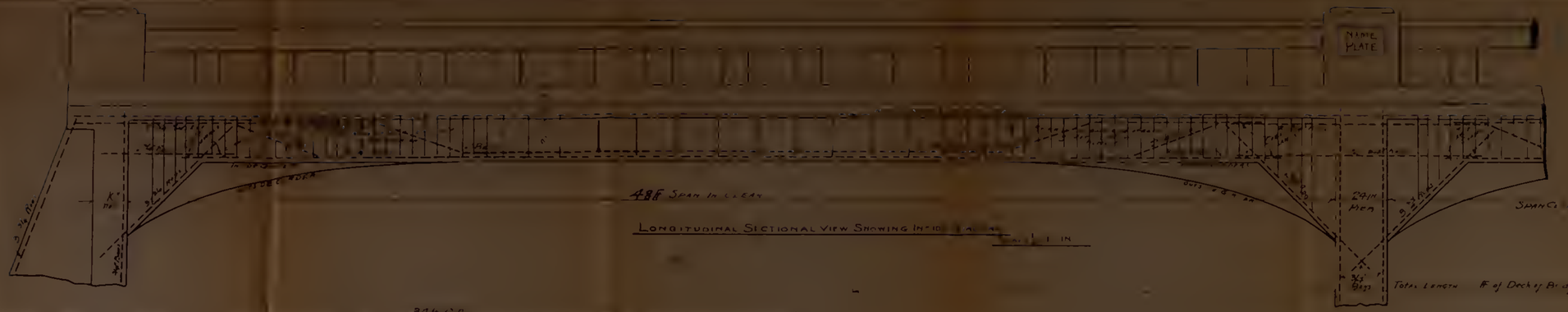
TYPICAL REINFORCED CONCRETE HIGHWAY BRIDGE 50' SPAN AS BUILT BY THE STATE of COLORADO 1907 and 1908

Designed by G.M. Houston, Deputy. State Engineer's Office. Denver Colo.

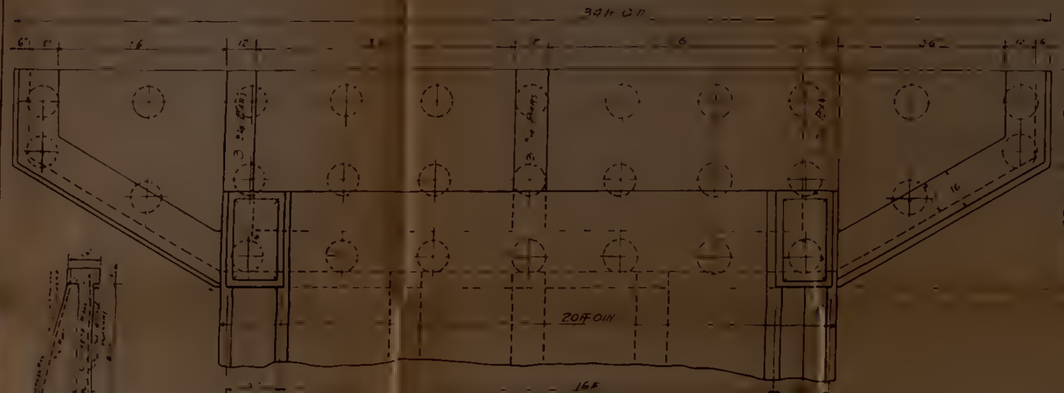
Approved [illegible] State Engineer

NOTE

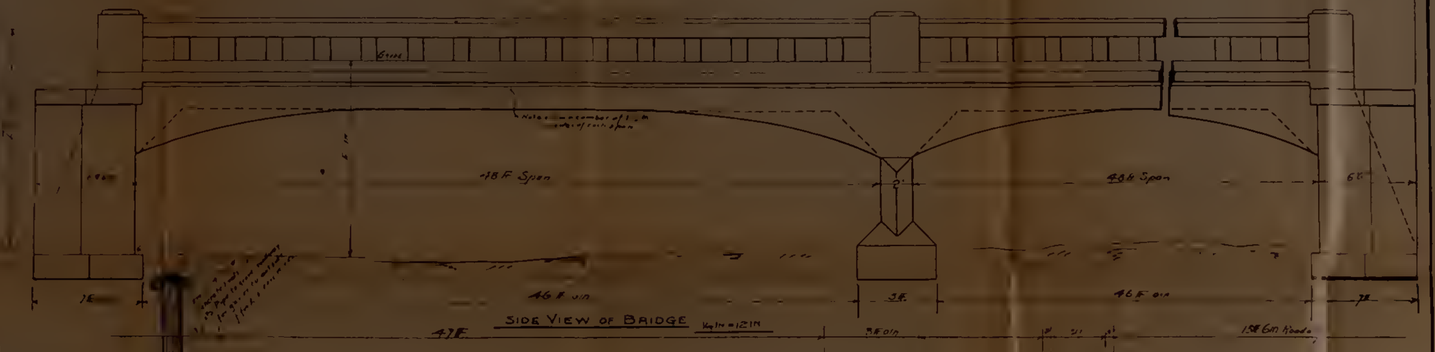
USE FIGURES FOR ALL MEASUREMENTS AS GRADING IS CHANGED TO SUIT THE LOCATION

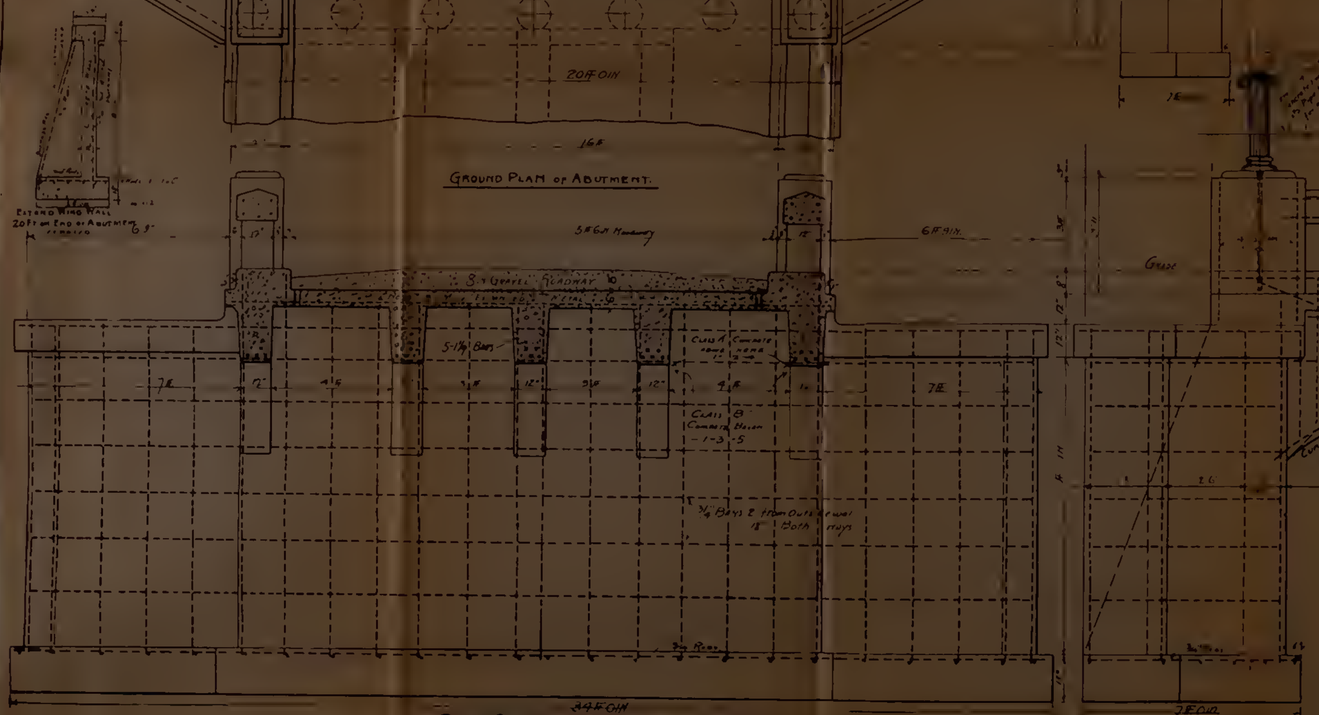


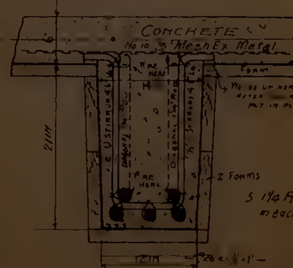
LONGITUDINAL SECTIONAL VIEW SHOWING INTIOR

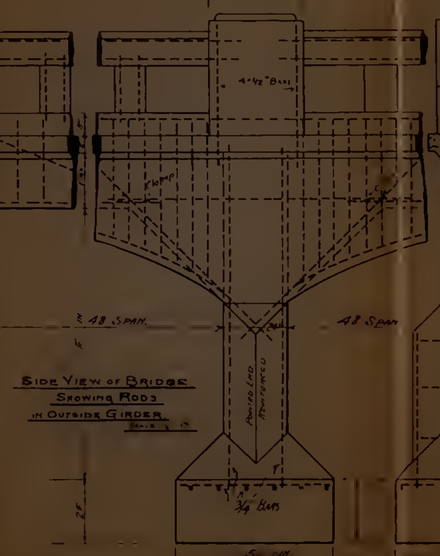


GROUND PLAN of ABUTMENT.

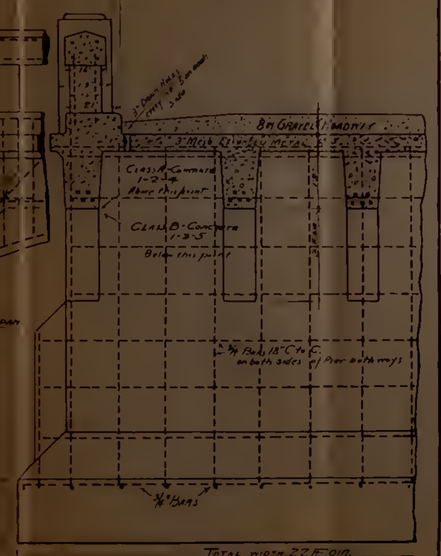


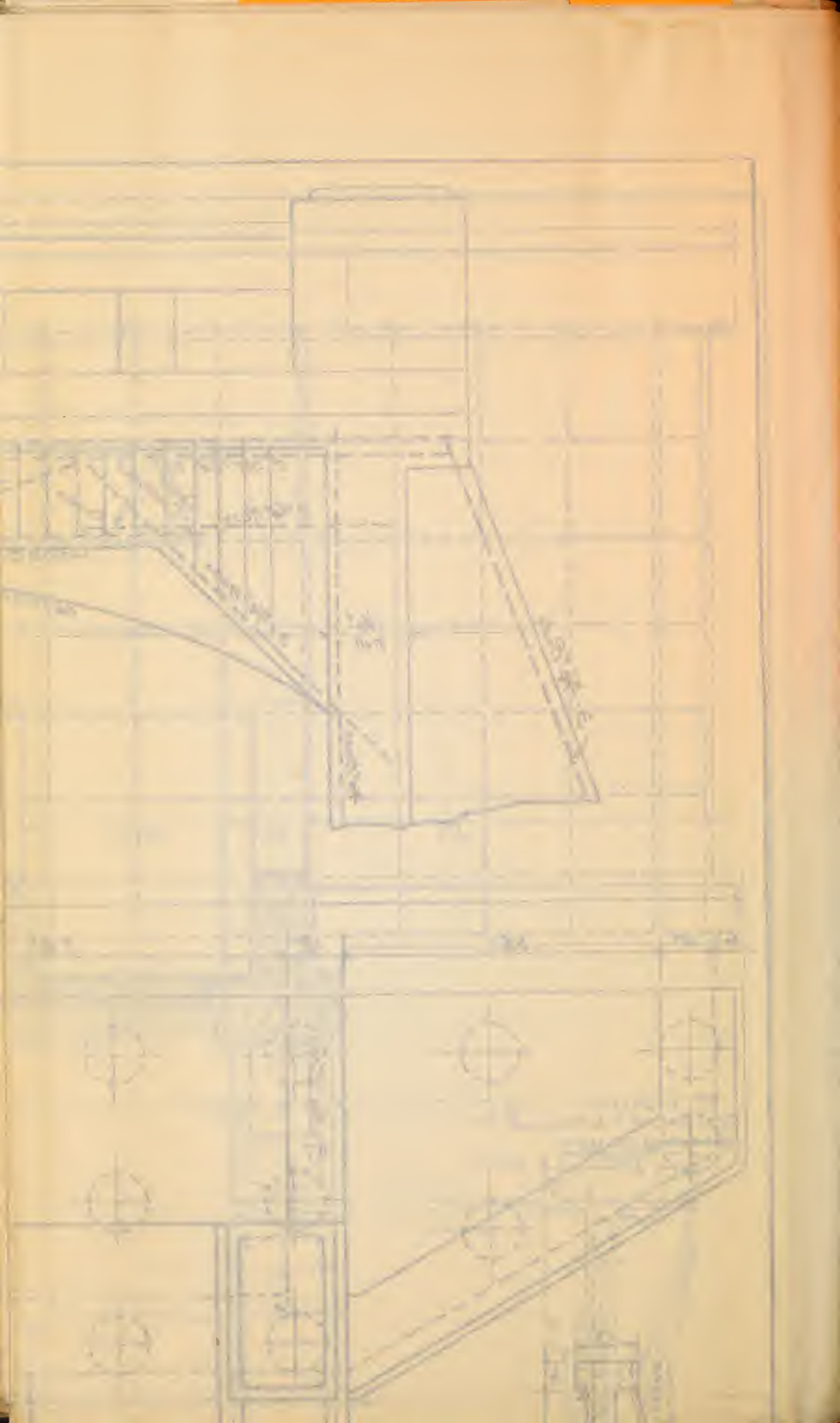

Extend Wing Wall 20ft on End of Abutment if required
8" Gravel Roadway
5-1¼ Bars
Class B Concrete 1-2½-5
¾" Bars 2 ft on Outside Rows 18" both ways
44F 0in
CROSS SECTION OF PIER Showing ABUTMENT





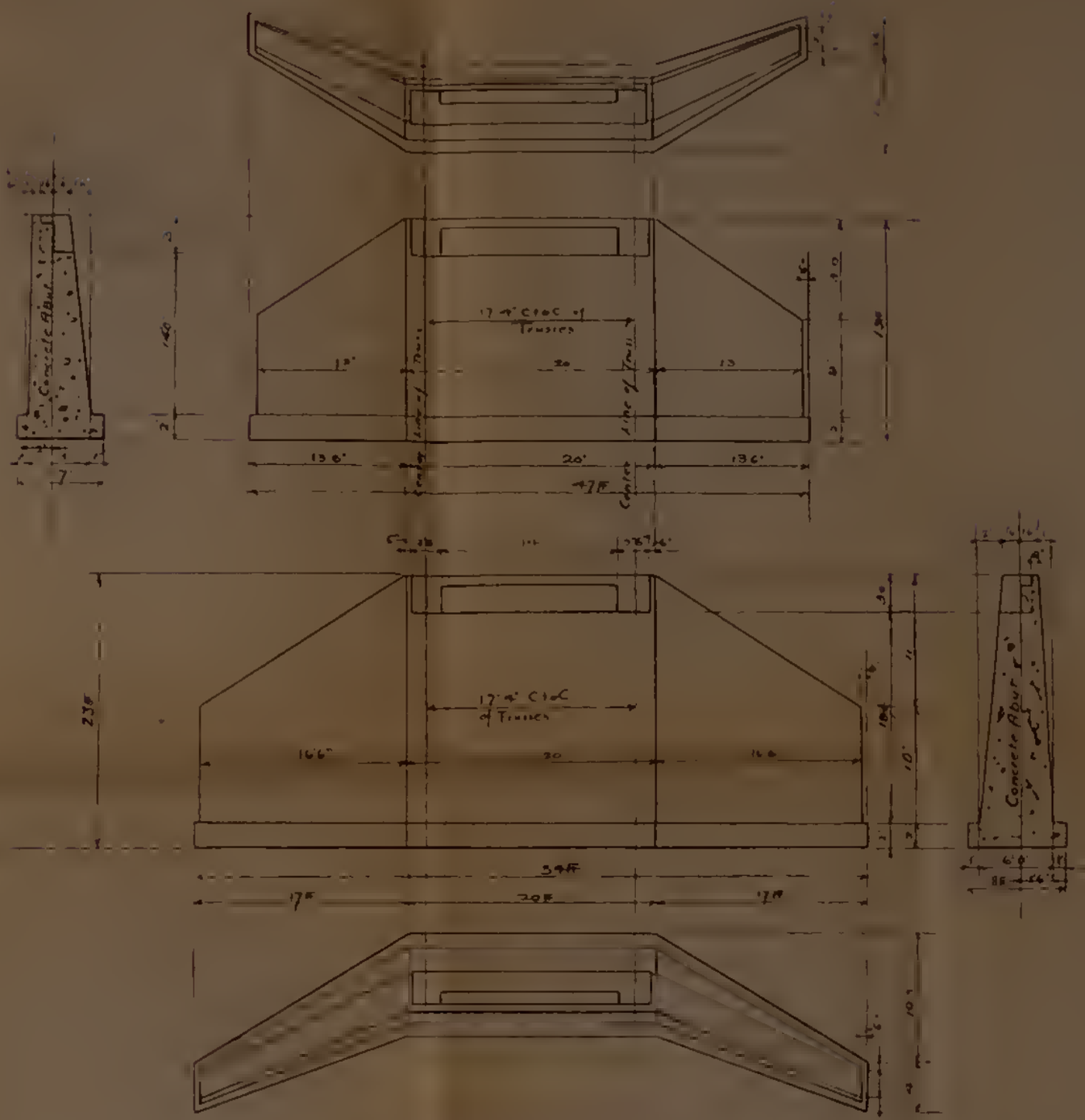
SIDE VIEW of BRIDGE Showing RODS IN OUTSIDE GIRDER





GARFIELD COUNTY
BRIDGE CONCRETE PIERS
NEAR SILT
State Engineer's Office, Denver. March 1908.

NORTH ABUTMENT



1/5" = 1'-0"

Approved W. H. Bancroft
State Engineer

14 PANELS @ 18'0" = 252'0" C to C.

LOWER LATERALS

UPPER LATERALS

FLOOR 4" x 12" - 16 ff
RUB GUARD 3" x 10"
WHEEL " 6" x 8"
POSTS 4" x 6" SPACED 6' APART
RAIL 2" x 6" & 2" x 4"
HOOK BOLT 6 FF APART 3/4" ø CENTRE

JOIST

7 LINES 9 I 21# } CENTRE TO CENTRE OF FLOOR BEAMS
2 " 9 I 13 1/2# } CENTRE
4 " 3" x 8" NAILING BOLTED TO JOIST

FOUR SHOES REQUIRED

BASE PL 28" x 5/8" x 2' 0" PLANED TO 3/4"
4 LS 3 1/2" x 3 1/2" x 5/16" x 1' 10"
2 PLS 9 1/2" x 3/8" x 1' 10"
2 " 11" x 3/8" x 1' 11"
1 BAR 2" x 3/4" x 1' 10" LEFT END ONLY
1 FILLER 12" x 9" x 1/2" x 1' 2"
1 LAT PL 7" x 3/8" x 1' 6"
1 TAP BOLT 1" ø x 3 1/2" LONG
1 CAP PL 10 1/2" x 3/8" x 1' 4"
PLS 8" x 2 1/2" x 3/8" x 1' 2"
8 ANCHOR BOLTS 1 1/2" x 1' 6"

TWO ROLLER PLATES
1 ROLLER 5" ø 3" MIDDLE PART
2 HANDS 2" x 1/2" x 1' 2"
2 RODS 1" ø 1' 8 1/2"
2 GP 1 1/4" DIAM x 1' 7"

DETAIL OF HIP JOINT.

DETAIL OF TOP CHORD SPLICE

DETAIL INTERMEDIATE POST CONNECTION

DETAILS STRUTS AND CONNECTIONS.

END PEDESTAL CAP

END PEDESTAL CAP

TOP PED PL

2 BED PLS 21" x 10" x 1' 6"

DETAIL OF BEAM CON.

LATERAL CON

COOPERS SPECIFICATIONS 1901

CLASS C - EXCEPT LOADING AS FOLLOWS
LIVE LOAD ON TRUSSES 1960# PER LIN FT
DEAD " 1000#
CONCENTRATED LOAD 130
12 TONS ON 2 AXLES 10 ft BASE

GENERAL NOTE

RIVETS IN CHORDS AND BEAMS 7/8" DIAM
RIVETS IN LATERALS, GUSSETS, CHANNELS 3/4" DIAM
PAINT ALL METAL WORK WITH GRAPHITE PAINT AS SPECIFIED
FLOOR BEAMS
BOLTS AND GENERAL PLANING OF SHOP DETAILS TO BE
MADE UP BY CONTRACTOR AND SUBMITTED TO THE
STATE ENGINEER FOR APPROVAL BEFORE ANY

Adopted by the Board of Commissioners
at the Bridge across the GRAND RIVER
at SILT - GARFIELD CO. COLORADO
H B 567 1907

Gov. A.E. Campbell Governor
State Engineer
James Beard Chairman
C.W. Hayden
Designed by G.N. Houston

STATE BRIDGE for GARFIELD COUNTY
252 FEET STEEL BRIDGE
NEAR SILT COLO.

Scale Grand Plans 1/4" = 1' 0" Details 1" = 1' 0"
STATE ENGINEERS OFFICE, DENVER COLO.
Approved
State Engineer
Geo. H. Angell

Map of the OFFICIAL SURVEY of the

FOSSIL CREEK RESERVOIR

BELONGING TO

THE NORTH POUDRE IRRIGATION CO.

LOCATED IN WATER DISTRICT No. 3.

Surveyed by

STATE ENGINEER OF COLORADO

In compliance with

Sec. 6, Chapter 85, Session Laws 1904-6-8

Field work and Computations by T.W. JAYCOX.

L.G. CARPENTER. STATE ENGINEER

Drawn by GEO. H. LANGELL.

SCALE 200 Ft. to 1 IN.

T. 6 N. R. 68 W.

WEBSTER LAKE

SEAMAN LAKE

SWEDE LAKE

INLET FROM CACHE LA POUDRE RIVER.

OUTLET

SPILLWAY

ROAD

CERTIFICATE